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#### **REMARKS**

Claims 1-17, 19, 20, and 22-30 are currently pending. Claims 1, 3-8, 10, 13-17, 19, 20, 22, 24, 29, and 30 have been amended for clarification purposes only. It is respectfully submitted that no new matter has been added.

The Patent Office is thanked for its allowance of claims 20, 24, and 25. However, applicant believes that all pending claims are allowable.

Applicant's claimed invention relates to a method for relating a plurality of system identifications (SIDs) in a mobile device is provided. The method includes the steps of identifying a plurality of SIDs having a common spatial characteristic, storing the identified plurality of SIDs, comparing a SID received from a wireless service provider to the stored plurality of SIDs and, upon any one of the plurality of stored SIDs matching the received SID, declaring the wireless service provider as being a Home service provider. Alternatively, or in conjunction with comparing received SIDs for the case where none of the plurality of stored SIDs matches the received SID, Applicant's claimed invention further compares a received System Operator Code (SOC) to stored SOCs, including at least one of a Home SOC, a Partner SOC, a Favored SOC and a Forbidden SOC.

The Patent Office rejected claims 1 and 17 under 35 U.S.C. 103(a) as being unpatentable over Bridges, U.S. Published Patent Application No. 2003/0186695, in view of Raith, U.S. Patent No. 5,404,355.

### Claim 1 recites

A method for operating a wireless communication system of a type that transmits system identification (SID) parameters to mobile stations, comprising storing a SID that identifies a home service provider for the mobile station; identifying a plurality of SIDs having a common spatial characteristic; storing the identified plurality of SIDs in a memory that is accessible by a mobile station; comparing a SID received from a wireless service provider to the stored plurality of SIDs; and upon any one of the plurality of stored SIDs matching the received SID,

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declaring the wireless service provider as being a home service provider for the mobile station.

Claim 17 recites

A mobile station, comprising: a controller; a wireless transceiver; and at least one memory, the at least one memory comprising a location for storing a home SID and other locations for storing a plurality of cousin SIDs, wherein a SID received through said wireless controller is declared by said controller to be a home service provider if the received SID matches the stored home SID or any one of the plurality of stored cousin SIDs, wherein the cousin SIDs are stored into said at least one memory under the direction of a prepaid service provider, and correspond to SIDs associated with one or more service providers that service a predetermined geographical area that is defined to be a non-roaming area of a customer of the prepaid service provider, wherein the home SID is stored in at least one memory without the direction of a prepaid service provider.

Bridges, in paragraph 0014, discloses "[t]he SID or equivalent system identification number is broadcast be each wireless carrier and is used by the mobile station to determine whether or not the mobile station is operating in its home network or if it is operating in a roaming condition." Bridges does not disclose declaring a wireless service provider as being a home service provider or home category service provider.

Bridges does not disclose or suggest "identifying a plurality of SIDs having a common spatial characteristic." There is no disclosure or suggestion by Bridges of a step for "identifying a plurality of SIDs having a common spatial characteristic." The Patent Office asserted on page 3, lines 5-8, of the Office Action dated January 3, 2007, "Bridges does not explicitly show that identifying a plurality of SIDs having a common spatial characteristic; and upon any one of the plurality of stored SIDs matching the received SID, declaring the wireless service provider as being a Home service provider for the mobile station" Furthermore, the Patent Office asserted on

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page 4, lines 1-6, of the Office Action dated January 3 2007 as follows:

Bridges does not explicitly show that at least one memory comprising a location for storing a Home SID and other locations for storing a plurality of Cousin SIDs, Cousin SIDs read on "wireless carrier identities"), wherein a SID received through said wireless controller is declared by said controller to be associated with a Home service provider if the received SID matches the stored Home SID or any one of the plurality of stored Cousin SIDs.

Since the Patent Office asserts that the identified difference(s) between Bridges and claims 1 and 17 are to be taught in column 3, line 42, through column 4, line 12 and/or in column 19, lines 3-16 of Raith, it bears reproducing the disclosure from these cited passages to highlight that Raith indeed does not teach the alleged difference(s).

Raith discloses, from column 3, line 42, through column 4, line 12, as follows:

While in the idle (standby) state, each of the mobile stations M1-M10 continuously determines whether a page message addressed to it has been received over the control channel. When, for example, an ordinary (landline) subscriber calls one of the mobile subscribers, the call is directed from the PSTN to the MSC 20 where the dialed number is analyzed. If the dialed number is validated, the MSC 20 requests some or all of the base stations B1-B10 to page the called mobile station throughout their corresponding cells C1-C10. Each of the base stations B1-B10 which receive the request from the MSC 20 will then transmit over the control channel of the corresponding cell a page message containing the MIN of the called mobile station. Each of the idle mobile stations M1-M10 will compare the MIN in the page message received over the control channel being monitored with the MIN stored in the mobile station. The called mobile station with the matching MIN will transmit a page response over the control channel to the base station which forwards the page response to the MSC 20. Upon receiving the page response, the MSC 20 selects an available voice channel in the cell from which the page response was received and requests the base station in that cell to order the mobile station via the control channel to tune to the selected voice channel (the MSC keeps a list of all of the channels in its service area and their status, i.e., free, busy, blocked, etc., at any time). A through-connection is established once the mobile station has tuned to the selected voice channel. When, on the other hand, a mobile subscriber initiates a call, e.g., by dialing the telephone number of an ordinary subscriber and pressing the "send" button on the telephone handset in the mobile station, the MIN and ESN of the mobile station and the dialed

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number are sent over the control channel to the base station and forwarded to the MSC 20 which validates the mobile station, assigns a voice channel and establishes a through-connection for the conversation as before.

Raith discloses, column 19, lines 3-16, as follows:

Each logical channel transports information streams which have certain common characteristics or which are of a similar type. A logical channel may be characterized according to its distribution path (point-to-point or point-to-multipoint) and direction of transmission (unidirectional or bidirectional). The BCCH is a unidirectional, point-to-multipoint channel which carries overhead information enabling the mobile stations, for example, to identify the system and the control and paging channels. The types of overhead information carried on the BCCH of the DCC correspond, to some extent, to the types of overhead messages sent in the OMT on the analog control channel (ACC), e.g. , SPOM, GOAM and REGID.

It is noted that Bridges discloses (paragraph 0013) "a system identification code (SID) and/or System Operator Code (SOC) is stored to uniquely identify the home service provider for the unit," whereas Raith discloses (column 2, lines 27-30) "a mobile identification number (MIN) which, in the United States, is a digital representation of the telephone directory number of the mobile subscriber." That is, whereas Bridges does concern with the identification of a service provider, in contrast, Raith is concerned with identification of the mobile subscriber – figuratively speaking, apples and oranges.

Applicant asks the Patent Office, regarding claim 1, where exactly is the teaching in these passages or elsewhere in Raith for "upon any one of the plurality of stored SIDs matching the received SID, declaring the wireless service provider as being a home service provider for the mobile station?"

Applicant' asks the Patent Office, regarding claim 17, where exactly is the teaching in Raith for "wherein a SID received through said wireless controller is declared by said controller to be a home service provider if the received SID matches the stored home SID or any one of the plurality of stored cousin SIDs?"

Further regarding claim 17, where exactly in the passage from column 3, line 42, through

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column 4, line 12, or in the passage from column 19, lines 3-16, in Raith, is there a teaching of "cousin SIDs," "SIDs associated with one or more service providers that service a predetermined geographical area," or "a predetermined geographical area that is defined to be a non-roaming area of a customer of the prepaid service provider?"

Barring such teachings, claims 1 and 17 are allowable over Bridges in view of Raith.

The Patent Office rejected claims 4, 7, 9, 10, 12, 15, 22, 23, 26, and 28 under 35 U.S.C. 103(a) as being unpatentable over Bridges in view of Raith, and further in view of McGregor, U.S. Published Patent Application No. 2001/0000777.

As discussed above, Bridges in view of Raith does not make obvious either claim 1 or claim 17 and does not disclose or make obvious declaring a wireless service provider as being a home service provider or home category service provider.

# Claim 10 recites

A wireless communication system of a type that transmits system identification (SID) parameters to mobile stations, comprising in mobile stations associated with a prepaid service provider at least one memory storing a SID that identifies a home service provider for the mobile station and a list containing a plurality of other SIDs having a common spatial characteristic, the mobile station comprising a processor that is coupled to the at least one memory and that is responsive to a received SID for comparing the received SID to the SIDs in the list of SIDs and, upon any one of the plurality of SIDs matching the received SID, declaring a wireless service provider that transmitted the SID as being the home service provider for the mobile station.

# Claim 22 recites

A method for operating a wireless communication system of a type that transmits system identification (SID) parameters to prepaid mobile stations, comprising: storing, in at least one memory that is accessible by a mobile station, a first SID that identifies a home service provider for the mobile station and a plurality of second SIDs; comparing a SID received from a wireless service provider to the plurality of second SIDs and upon the received SID matching any one of the plurality of second SIDs, declaring the wireless service provider to be a home category service provider for the mobile station; and if the received SID does not match any one of the plurality of second SIDs, comparing the received SID to

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the first SID and upon the received SID matching the first SID, declaring the wireless service provider to be the home category service provider for the mobile station.

### Claim 26 recites

A method for operating a wireless communication system of a type that transmits system identification (SID) and system operator code (SOC) parameters to prepaid mobile stations, comprising: storing, in at least one memory that is accessible by a mobile station, a SOC that identifies a home service provider for the mobile station and a plurality of SIDs; comparing a SID received from a wireless service provider to the plurality of stored SIDs and upon the received SID matching any one of the plurality of stored SIDs, declaring the wireless service provider to be a home category service provider for the mobile station; and if the received SID does not match any one of the plurality of stored SIDs, comparing a received SOC to the stored SOC and upon the received SOC matching the stored SOC, declaring the wireless service provider to be the home category service provider for the mobile station.

Similar to the discussion regarding claims 1 and 17, neither Bridges nor Raith discloses or suggests claim 10's' a list containing a plurality of other SIDs having a common spatial characteristic" and "responsive to a received SID for comparing the received SID to the SIDs in the list of SIDs and, upon any one of the plurality of SIDs matching the received SID, declaring a wireless service provider that transmitted the SID as being the home service provider for the mobile station," claim 22's "upon the received SID matching any one of the plurality of second SIDs, declaring the wireless service provider to be a home category service provider for the mobile station," or claim 26's "upon the received SID matching any one of the plurality of stored SIDs, declaring the wireless service provider to be a home category service provider for the mobile station; and if the received SID does not match any one of the plurality of stored SIDs, comparing a received SOC to the stored SOC and upon the received SOC matching the stored SOC, declaring the wireless service provider to be the home category service provider for the mobile station."

Specifically, Bridges in paragraph 0060 does not teach "comparing the received SID to the SIDs in the list of SIDs" of claim 10. Instead, Bridges in paragraph 0060 merely teaches a comparison of a received SID or a received SOC with the home SID or the home SOC; there is

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no list. Furthermore, Raith in column 19, lines 3-16, does not teach "a list containing a plurality of other SIDs having a common spatial characteristic" and in column 3, line 42, through column 4, line 12, does not teach "a list containing a plurality of other SIDs having a common spatial characteristic."

Bridges in paragraphs 0014 and 0060 discloses one home SID not "a list containing a plurality of other SIDs having a common spatial characteristic." Raith does not show paragraphs 0060 and 0061 which were indicated on page 9, lines 9-10, of the January 3 2007 Office Action. Because Raith does not have the alleged paragraphs 0060 and 0061, the rejection of claim 22 is confusing. Clarification is requested. Nonetheless, because Bridges does not provide the teaching it is purported to provide, and because Raith does not make up for this deficiency, claim 22 is not made obvious by Bridges in view of Raith.

Claim 26 is not made obvious by Bridges in view of Raith for reasons similar to claim 22 not being made obvious by Bridges in view of Raith.

McGregor, which discloses a home SID and a prepaid mode, does not remedy the deficiency of Bridges and/or Raith.

Thus, claims 4, 7, 9, 10, 12, 15, 22, 23, 26, and 28 are allowable over Bridges, Raith, and/or McGregor.

The Patent Office rejected claims 2, 3, and 11 under 35 U.S.C. 103(a) as being unpatentable over Bridges in view of Raith, and further in view of Mizikovsky, U.S. Patent No. 5,983,115.

As discussed above, Bridges in view of Raith does not make obvious either claim 1 or claim 17 and does not disclose or make obvious declaring a wireless service provider as being a home service provider or home category service provider.

Mizikovsky discloses (abstract) a communication device that locates a wireless service provider in a multi-service provider environment using a stored list of preferred service providers, the list has a plurality of uniquely identified sublists, each sublist is associated with a different geographic area and identifies a more preferred service provider and a less preferred

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service provider. Mizikovsky discloses (col. 8, lines 36-41) the mobile communication device registers with the best stored SOC or SID, that is, an SOC or SID that has at least been associated with a preferred service provider in which the best service provider is identified by comparing the stored SOCs or SIDs with the list of preferred SOCs or SIDs. Mizikovsky seeks to determine if a received SID or SOC is an optimal, preferred, or prohibited service provider (col. 5, lines 57-67) and does not appear to disclose or suggest assigning a home service provider (e.g., col. 3, lines 10-18). In contrast, the claimed invention in claims 2, 3, and 11 recites that if a received SID matches one of a plurality of SIDs, then the service provider corresponding to the matched SID from the plurality of SIDs is declared to be a home service provider for the mobile station.

Thus, claims 2, 3, and 11 are not made obvious by Bridges, Raith, and/or Mizikovsky.

Furthermore, there is an inconsistency in the rejection of claim 11 found on page 12, lines 13-14, item 5. Claim 10 is the base claim for claim 11. Claim 10 was rejected by Bridges, Raith and McGregor where the Patent Office alleged that "Bridges and Raith, in combination, fails to teach in mobile stations associated with a prepaid service provider at least one memory storing a SID that identifies a Home service provider for the mobile station" and that McGregor teaches this difference. In the header of item 5, there is no mention of McGregor nor is there mention of McGregor in the body of the rejection.

The Patent Office rejected claims 5, 6, 8, 19, and 27 under 35 U.S.C. 103(a) over Bridges, in view of Raith and further in view of Bamburak, U.S. Patent No. 6,807,418.

The Patent Office considers Bridges to teach a first SID (paragraph 0013), a plurality of second SIDs (paragraph 0046), and that comparing the SIDs and declaring a Home category service provider (paragraphs 0014, 0060). The disclosure by Bridges of a mobile station stores a SID to uniquely identify a home service provider (paragraph 0013) and that a broadcast SID is compared to the home SID to determine whether the mobile phone is roaming (paragraph 0014) is prior art that provides background against which the invention of Bridges is set. Bridges does not disclose declaring a wireless service provider as being a home service provider for the mobile station after storing a SID as a home service provider and after comparing a received SID to at least one of a plurality of stored SIDs.

Bridges discloses, as his invention, the Preferred System Identification List (PSL) and/or

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an Intelligent Roaming Database Downloading (IRDB) is accessed to indicate the band where the mobile station is to find a preferred system (paragraph 0046).

The disclosure in Bamburak is clear that there is only one home service provider (e.g., column 11, lines 1-6). In column 11, lines 22-29, Bamburak indicates that the mobile station will register on a neutral service provider if the home service provider is not found, a partner service provider is not found, and a preferred service provider is not found.

Thus, claims 5, 6, 8, 19, and 27 are allowable over Bridges, Raith, and/or Bamburak.

The Patent Office rejected claim 11 under 35 U.S.C. 103(a) over Bridges, Raith, and McGregor, and further in view of Mizikovsky.

It does not appear that Bridges, Raith, McGregor, or Mizikovsky discloses or suggests "a list containing a plurality of other SIDs having a common spatial characteristic." Mizikovsky, in particular, does not disclose or suggest such a list.

Thus, claim 11 is allowable over Bridges, Raith, McGregor, and/or Mizikovsky.

The Patent Office rejected claims 13, 14, and 16 under 35 U.S.C. 103(a) over Bridges, Raith, and McGregor, and further in view of Bamburak.

None of Bridges, Raith, McGregor, or Bamburak disclose or suggest comparing a received SID to SIDs on a list containing a plurality of other SIDs having a common spatial characteristic to declare a home service provider (subject matter found in base claim 10).

Thus, claim 11 is allowable over the prior art of record.

The Patent Office rejected claims 29 and 30 under 35 U.S.C. 103(a) over Bridges in view of Raith and further in view of Osmani, U.S. Patent No. 5,815,807.

Osmani discloses (column 1, lines 42-49) "Billing services for radiotelephone subscriber units include prepaid short term billing structures such as calling cards and debit cards and postpaid periodic billing structures. Cellular communication systems are owned and operated for profit by communications companies who typically sell use of the system based on the amount of time spent by the user on the system and the distance involved between the communicating locations. Users may lease or buy cellular phones in order to use them on the system."

As discussed above, Bridges in view of Raith does not make obvious either claim 1 or

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claim 17 and does not disclose or make obvious declaring a wireless service provider as being a home service provider or home category service provider. Osmani does not remedy the deficiency of Bridges in view of Raith.

Thus, claims 29 and 30 are allowable over the prior art of record.

The Patent Office is respectfully requested to reconsider and remove the rejections of the claims under 35 U.S.C. 103(a) based on Bridges, Raith, McGregor, Mizikovsky, Bamburak, and/ or Osmani, and to allow all of the pending claims 1-17, 19, 20, and 22-30 as now presented for examination. An early notification of the allowability of claims 1-17, 19, 20, and 22-30 is earnestly solicited.

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